PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

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EA2018-799

Dean McFarren
Manager – EAM Distribution Compliance
Pacific Gas and Electric Company (PG&E)
1850 Gateway Blvd., 5th Floor, Room 5053C
Concord, CA 94520

SUBJECT: Audit of PG&E's Sierra Division

Mr. McFarren:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Wilson Tsai of ESRB staff conducted an electric distribution audit of PG&E's Sierra Division from April 16, 2018 to April 20, 2018. During the audit, ESRB staff conducted field inspections of PG&E's facilities and equipment and reviewed pertinent documents and records.

During the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response within 30 days of your receipt of this letter indicating all corrective actions and preventive measures, taken or planned, to address the violations to ensure compliance with GO requirements. The response should indicate the date of each remedial action and preventive measure completed within 30 days. For any outstanding items not addressed within 30 days, please provide the projected completion dates of all actions for all violations outlined in Sections II & IV of the enclosed Audit Findings.

If you have any questions concerning this audit, please contact Wilson Tsai at (415) 703-1359 or wilson.tsai@cpuc.ca.gov.

Sincerely.

Banu Acimis, P.E.

Program and Project Supervisor

Electric Safety and Reliability Branch

Safety and Enforcement Division

California Public Utilities Commission

Enclosure: CPUC Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC

Lee Palmer, Deputy Director, Office of Utility Safety, SED, CPUC

Charlotte TerKeurst, Program Manager, ESRB, CPUC

Ryan Yamamoto, Senior Utilities Engineer- Supervisor, ESRB, CPUC

Wilson Tsai, Utilities Engineer, ESRB, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, ESRB staff reviewed the following records:

- Completed and cancelled work orders in the last 12 months
- Completed, cancelled, and pending late work orders in the last 60 months
- Patrol and detailed inspection records from March 1, 2013 to February 28, 2018
- Pole loading calculations in the last 12 months
- Third party notifications received and sent out in the last 12 months
- Reliability metrics (SAIDI, SAIFI, CAIDI) and outage report for each feeder in the division from 2013 to 2018
- Sustained outages in the division from 2013 to 2018
- New Construction projects in the last 12 months

II. Records Violations

ESRB staff observed the following violations during the record review portion of the audit:

1. GO 95, Rule 18-A2a states in part:

"All companies shall establish an auditable maintenance program for their facilities and lines. All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or nonconformances with General Order 95 on the company's facilities."

GO 95, Rule 31.1, Design, Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment."

GO 128, Rule 17.1, Design, Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to

the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of [the] communication or supply lines and equipment."

ESRB staff reviewed late work orders and determined that PG&E did not address a total of 946 work orders by the assigned due date.

2. GO 95, Rule 31.2, Inspection of Lines states in part:

"Lines shall be inspected frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard."

GO 165, Section III-B, Standards for Inspection states in part:

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1."

ESRB noted that PG&E completed overhead patrols or inspections for the following maps past their assigned due date:

- 1. Map I3516 Patrol was due on December 31, 2013. PG&E completed the patrol on February 25, 2014.
- 2. Map L20 Inspection was due in 2016. PG&E completed the inspection on May 18, 2017.

3. GO 128, Rule 17.2, Inspection states in part:

"Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements these rules."

GO 165, Section III-B, Standards for Inspection states in part:

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1."

ESRB noted that PG&E completed underground inspections for the following map past their assigned due date:

Map J3613 – Inspection was due on June 27, 2016. PG&E completed the inspection on July 14, 2017.

III. Field Inspection

During the field inspection, ESRB staff inspected the following facilities:

Structure Type	Structure Number	Address	City
Pole		1 Pole N/O I/O Ridge Rd. &	Newcastle
		Ralston Ln.	
Pole		2 Poles N/O I/O Ridge Rd. &	Newcastle
		Ralston Ln.	
Pole		3 Poles N/O I/O Ridge Rd. &	Newcastle
		Ralston Ln.	
Pole		4 Poles N/O I/O Ridge Rd. &	
TOIC		Ralston Ln.	Newcastle
Pole		5 Poles N/O I/O Ridge Rd. &	
1 Ole		Ralston Ln.	Newcastle
Pole		6 Poles N/O I/O Ridge Rd. &	
1 OIC		Ralston Ln.	Newcastle
Pole		Intersection of Ridge Rd. &	27
1 Ole		Ralston Ln.	Newcastle
Pole		198 Cary Dr.	Auburn
Pole		197 Cary Dr.	Auburn
Pole		180 Cary Dr.	Auburn
Pole		160 Cary Dr.	Auburn
Pole		146 Cary Dr.	Auburn
Pole		110 Cary Dr.	Auburn
Pole		192 Cary Dr.	Auburn
Pole		13260 Luther Rd.	Auburn
Pole		Across from 13260 Luther Rd.	Auburn
Pole		13257 Luther Rd.	Auburn
Pole		227 Carriage Ln.	Auburn
Pole		239 Carriage Ln.	Auburn
Pole		251 Carriage Ln.	Auburn
Pole		252 Carriage Ln.	Auburn
Pole		13167 Luther Rd.	Auburn
Pole		131 Covey Rd.	Auburn
Dolo		I/O Covey Rd. & Pine Hill	Auburn
Pole		Rd.	
Pole		230 Pine Hill Rd.	Auburn
Pole		280 Pine Hill Rd.	Auburn
Pole		5681 Gold Leaf Ln.	Placerville
Pole		1061 Bridgeview Ln.	Placerville
Pole		131 Bluejay Dr.	Placerville
Pole		140 Bluejay Dr.	Placerville
Pole		I/O 12 Oaks Ln. & Bluejay	Placerville
		Dr.	
Pole	Α	3121 12 Oaks Ln.	Placerville

Structure Type	Structure Number	Address	City
Pole		3101 12 Oaks Ln.	Placerville
Pole		3080 12 Oaks Ln.	Placerville
Pole		1050 Bridgeview Ln.	Placerville
Pole		1044 Bridgeview Ln.	Placerville
Pole		3301 Dusty Gold Ln.	Placerville
Pole		1091 Harris Rd.	Placerville
Pole		I/O Excelsior Rd. & Big Cut Rd.	Placerville
Pole		3374 Big Cut Rd.	Placerville
Pole		3381 Big Cut Rd.	Placerville
Pole	,	3377 Grice Ln.	Placerville
Pole		3340 Big Cut Rd.	Placerville
Padmounted Transformer	T-85007	4404 Mesquite Way	Rocklin
Padmounted Transformer	T-36639	5649 Black Willow Ct.	Rocklin
Padmounted Transformer	T-46860	5628 Black Willow St.	Rocklin
Padmounted Transformer	T-61686	5608 Black Willow St.	Rocklin
Subsurface Junction Box	J-99441	I/O Black Willow St. & Silver Lupine Ln.	Rocklin
Padmounted Switch	SW-66644	I/O Black Willow St. & Lake Pointe Dr.	Rocklin
Padmounted Switch	SW-47276	I/O Black Willow St. & Lake Pointe Dr.	Rocklin
Padmounted Switch	SW-91866	I/O Black Willow St. & Lake Pointe Dr.	Rocklin
Padmounted Switch	SW-81210	I/O Black Willow St. & Lake Pointe Dr.	Rocklin
Padmounted Transformer	T-27385	Across from 4205 Silver Lupine Ln.	Rocklin
Subsurface Splice Box		4212 Silver Lupine Ln.	Rocklin
Padmounted Transformer	T-39388	5705 Nolina St.	Rocklin
Subsurface Junction Box	J-16715	I/O Silver Lupine Ln. & Desert Mallow St.	Rocklin
Padmounted Transformer	T-27462	5667 Black Willow Ct.	Rocklin
Padmounted Transformer	T-0633	3540 Parkview Ln.	Rocklin
Pole	100058010	5115 4 th St.	Rocklin
Padmounted Transformer	T-2317	5609 Bolton Way	Rocklin

Structure Type	Structure Number	Address	City
Subsurface		5431 Paragon Ct.	Rocklin
Handhole		3431 I alagoli Ct.	Rockiii
Padmounted	T-2251	5412 Allan Ct.	Rocklin
Transformer			
Padmounted	T-2191	5829 Tweedsmuir Dr.	Rocklin
Transformer			
Padmounted	T-2196	5914 Allan Dr.	Rocklin
Transformer			

IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

1. GO 95, Rule 54.6-B, Vertical and Lateral Conductors, Ground Wires states in part:

"... That portion of the ground wire attached on the face or back of wood cross arms or on the surface of wood poles and structures shall be covered by a suitable protective covering (see Rule 22.8)..."

The following poles located at the below addresses had exposed and/or damaged ground moulding:

- 110 Cary Dr., Auburn
- 13260 Luther Rd., Auburn

2. GO 95, Rule 56.2, Use states in part:

"Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44."

The pole located at 3374 Big Cut Rd., Placerville had slack on the primary down guy.